



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/697,788

10/26/2000

James R. Suter

06558/005001

5592

22511

7590

01/14/2005

OSHA & MAY L.L.P.
1221 MCKINNEY STREET
HOUSTON, TX 77010

EXAMINER

GUTIERREZ, ANTHONY

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,788

Applicant(s)

SUTER ET AL.

Examiner

Anthony Gutierrez

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-23 and 51-53 is/are allowed.
- 6) ☒ Claim(s) 24-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al. (US Patent 6,128,579).

As to claim 24, McCormack et al. discloses a method for automated management of hydrocarbon gathering, the method comprising: collecting well test data from at least one of a plurality of producing wells in a hydrocarbon gathering system using the well test data to automatically reallocate a volume of produced hydrocarbons to at least one of the plurality of producing wells (col. 2, line 68-col. 3, line 8).

As to claim 26, McCormack et al further discloses wherein the well test data is used to automatically populate regulatory forms (col. 12, lines 7-9).

As to claim 27, McCormack et al further discloses wherein the well test data is automatically reported to selected users (col. 12, lines 4-6).

Art Unit: 2857

3. Claims 25, and 28-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al. (US Patent 6,128,579) in view of Dutton et al. (US Patent 6,318,156).

As to claims 28, 35, 39, 40, 45, and 50, McCormack et al. discloses a method for automated management of hydrocarbon gathering, the method comprising: calculating a system balance for a selected balance envelope relating to a volume of produced hydrocarbons, collecting hydrocarbon sample test data, and using the hydrocarbon sample test data to recalculate the system balance (col. 2, lines 68-col. 3, line 8 and col. 8, lines 29-44).

McCormack et al. does not specifically disclose that the test data is from automated measurement and control devices.

Dutton et al., however, discloses a hydrocarbon sample test data from at least one of a plurality of automated measurement and control devices positioned in a hydrocarbon gathering system (col. 1, lines 35-48 and col. 3, lines 19-26).

Dutton et al. further discloses that a fully automated well test system does not require manual sampling or laboratory analysis and helps to eliminate volumetric measurement errors (col. 3, lines 19-26)

It would therefore have been obvious to modify the method of McCormick, to use automated measurement and control devices, as taught by Dutton et al. in order to reduce the costs and measurement errors that occur when manual labor is used.

Neither reference, however, teaches automatic calculation of a balance based on well test data.

Calculation of a balance based on well test data is disclosed by McCormack et al. (see Fig. 1, database 20 which includes reservoir data obtained in the field (col. 5, lines 1-38 and col. 9, line 62-col. 10, line 2) and col. 12, lines 4-16). As disclosed in the cited passages, an operator is advised of an optimal assignment of allocation factors for the reservoir or the material balance solution of process.

It would have been obvious, however, to one of ordinary skill in the art at the time of invention to automate this calculation since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. (See *In re Venner*, 120 USPQ 192).

This would also apply to automatically updating a database after recalculation of the system balance since McCormack et al. teaches in the cited passages that the process of the system may be repeated for a new reservoir (see specifically col. 12, lines 10 and 11).

As to claims 31, 41, and 46, Dutton et al. further discloses wherein the plurality of measurement and control devices comprises electronic flow meters. (col. 5, lines 46-50).

As to claims 32, 33, 42, 43, 47, and 48 Dutton et al. further discloses wherein the plurality of automated measurement and control devices comprises programmable logic controllers and remote terminal units (col. 6, lines 58-64).

As to claims, 34, 44, and 49, Dutton et al. further discloses wherein the plurality of automated measurement and control devices comprises automated gas composition analysis devices (col. 5, lines 13-39).

As to claims 36-38, Dutton et al. further discloses wherein the system balance comprises a volume, energy or natural gas component balance (col. 1, lines 20-45 and col. 5, lines 1-4).

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al. (US Patent 6,128,579) in view of Streetman (US Patent 6,456,902).

McCormack et al. does not specifically disclose reallocating production costs to at least one of a plurality of producing wells.

Streetman, however, discloses that this is well known in prior art methods (col. 8, lines 10-17).

It would therefore have been obvious to one of ordinary skill in the art at the time of invention to produce a flow composition from multiple pipelines to minimize costs in order to allow greater possibilities for allocating financial resources.

5. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack et al. (US Patent 6,128,579) in view of Dutton et al. (US Patent 6,318,156), further in view of Streetman (US Patent 6,456,902).

As to claim 29, neither McCormack et al. nor Dutton et al. specifically disclose using the recalculated system balance to mix hydrocarbon products from at least two gathering pipelines to produce a desired hydrocarbon flow composition, wherein the desired hydrocarbon flow composition is selected to minimize hydrocarbon processing costs.

Streetman, however, discloses that this is well known in prior art methods (col. 8, lines 10-17).

It would therefore have been obvious to one of ordinary skill in the art at the time of invention to produce a flow composition from multiple pipelines to minimize costs in order to allow greater possibilities for allocating financial resources.

Allowable Subject Matter

6. Claims 1-4, 6-23, and 51-53 were previously allowed with reasons for allowance provided in an earlier action.

Claim 5, which depends from allowed claim 1, has been amended to overcome a previous claim objection and is presently allowed.

Response to Arguments

7. Applicant's arguments filed 10/27/04 have been fully considered with respect to claims 24-50, but they are not persuasive.

The Applicant has amended rejected independent claims to include limitations related to a volume of produced hydrocarbons arguing that these limitations are not taught in the cited references of rejection. The Examiner disagrees.

The Examiner has previously relied on citations in US Patent 6,128,579, to McCormack et al. which deals with a hydrocarbon reservoir having injection and production wells in which well patterns are defined volumes centered around each production well.

The Examiner believes that the examples, tables, and appendix provided in the reference (see column 13-end of document) show that the allocation and system balance are provided specifically with respect to volumes of produced hydrocarbons.

The Appendix includes data entries that are titled "Produced Oil" and "Produced Gas". Furthermore, hydrocarbon pore volumes were assigned to each pattern together with oil and gas production volumes for each well. A material balance process was employed to compute resulting pressures in each pattern (see specifically col. 14, lines 5-36).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2857

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Gutierrez whose telephone number is (571) 272-2215. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


-Anthony Gutierrez

1/7/04


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800